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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,008	04/05/2001	Richard M. Mathis	20804.00400	4898

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EXAMINER

TSAI, SHENG JEN

ART UNIT PAPER NUMBER

2186

DATE MAILED: 02/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/827,008

Applicant(s)

MATHIS, RICHARD M.

Examiner

Sheng-Jen Tsai

Art Unit

2186

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-93 is/are pending in the application.
- 4a) Of the above claim(s) 1-73 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 74-92 is/are rejected.
- 7) ☒ Claim(s) 93 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/29/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is taken in response to Applicant's Request for Continued examination (RCE) filed on December 29, 2005 regarding application 09/827,008 filed on April 5, 2001.

2. Claims 1-73 have been cancelled.

Claims 74-93 have been added.

Claims 74-93 are pending for examination.

3. ***Response to Amendment and Remarks***

Applicants' amendments and remarks have been fully and carefully considered.

It is noticed that new independent claims 74 and 92, as currently presented, each raises issue of "lack support from written description" according to 35 U.S.C 112, first paragraph, and that new independent claim 93, as currently presented, raises issue of "lack antecedent basis" according to 35 U.S.C 112, second paragraph.

The merits of patentability of independent claims 74 and 92, and those claims dependent from them, are not further analyzed in this Office Action, pending clarification from Applicant.

Refer to the corresponding sections below for details.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 74-92 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As to claim 74, four entities are recited in the claim: (1) a primary memory device, (2) a secondary secure memory device, (3) a control processor and (4) a memory protection unit. However, the drawings and written description presented in the Specification of the Application do not provide clear, specific correspondence of each of the four entities. Neither do they provide clear indication or description as to how these four elements are related to and interact with each other.

First, a text search of "memory protection unit" over the written description of the Application does not produce a single match. This leads to the questions of what is this "memory protection unit" and which element of the drawings does it correspond to.

Second, while the examiner is able to identify the "secondary secure memory device" as the component shown in figure 1, 22, which is illustrated in more details in figure 2 (because paragraph 0024 of the Patent Application Publication states that "Fig. 2 is a block diagram of a secure memory device in accordance with one embodiment of the present invention", it is not clear at all which component in the drawings corresponds to the "primary memory."

Again, a text search of "primary memory" produces no match. There are many instances of mentioning of "program memory," for example, the "flash memory"

associated with the secure memory device of figure 2, 30; the "program memory" associated the remote monitor unit of figure 3, 54; and the "program memory" associated the gaming apparatus controller of figure 4, 22. The question is which one is the intended "primary memory?"

Paragraph [0058] of the Patent Application Publication further states that "a means of storing a binary image of program memory is provided by electrically accessible memory 30," which suggests that the "flash memory" shown in figure 2, 30 may be the primary memory. However, this flash memory resides in and is part of the "secure memory device," yet the claim recites the limitation that "storing the calculated signature in a secondary memory device **separate from the primary memory device.**"

Third, it is not clear which component in figures 2, 3, 4 and 19 is the intended "control processor." Is it the "micro controller" of figure 2, 44? Or is it the "uP" of figure 3, 55? Or is it the "central processing unit" of figure 4, 292? Or is it the "uP" of figure 19, 480?

Clarifications are required to clearly identify these essential elements of the claim.

Claims 75-91 are rejected by virtue of their dependence from claim 74.

As to claim 92, the same issues as observed on claim 74 apply.

The merits of patentability of independent claims 74-92 are not further analyzed in this Office Action, pending clarification from Applicant.

Claim Objections

6. Claim 93 recites the limitation "the control device". There is insufficient antecedent basis for this limitation in the claim.

Claim 93 recites the limitations of
"the memory test device is operationally independent of the control device and the program memory ... ;" and
"the step of preventing comprises maintaining control device stability by placing a predetermined pattern on a control bus to the control processor to prevent erratic behavior of the control processor;"

First, there is the issue of whether "the control device" and "the control processor" refer to the same entity or different entities.

Second, neither "the control device" nor "the control processor" has sufficient antecedent basis as currently presented in this claim.

Clarification is required.

Allowable Subject Matter

7. Claim 93 is objected to as lacking antecedent basis, but would be allowable if able to clarify and overcome the objection.

8. Related Prior Art

The following list of prior art is considered to be pertinent to applicant's invention, but not relied upon for claim analysis conducted above.

- Martin, (US 5,729,212), "Gaming Device Providing High Security Communications with a Remote station."

- Wess et al., (WO 98/52664), "Gaming Device Security System: Apparatus and Method."
- Olarig et al., (US 6,009,524), "Method for the Secure Remote Flashing of a BIOS Memory."
- Mattison, (US 5,778,070), "Method and Apparatus for Protecting Flash Memory."
- Cragon et al., (US 3,573,855), "Computer memory Protection."

Conclusion

9. Claims 74-92 are rejected as explained above.

Claim 93 is objected to as lacking antecedent basis, but would be allowable if able to clarify and overcome the objection.

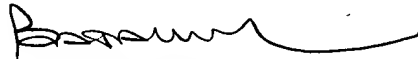
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheng-Jen Tsai whose telephone number is 571-272-4244. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Kim can be reached on 571-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sheng-Jen Tsai
Examiner
Art Unit 2186

January 31, 2006


PIERRE BATAILLE
PRINCIPAL MINER